

Department of Electrical and Computer Engineering
Naval Postgraduate School
Monterey, California

BSEE Degree Equivalence Checklist

The Department of Electrical and Computer Engineering at the Naval Postgraduate School is accredited at the Master of Science degree level through the Accreditation Board of Engineering and Technology. Students earning a Master of Science in Electrical Engineering or a Degree of Electrical Engineer at NPS, must either have attained an ABET accredited undergraduate Electrical Engineering degree, or earned the equivalency of a Bachelor of Science Degree in Electrical Engineering. Some courses from the student's undergraduate institution may count towards this equivalency, even though the final undergraduate degree may not have been in Electrical Engineering. Some courses taken at NPS may also be applied to meeting the undergraduate equivalency. This checklist is provided to document the completion of this equivalency.

Name of Student: _____ Email Address: _____

Enrollment Date: _____ Intended Graduation Date: _____

Institutions Attended	Dates of Attendance	Degrees Received	ABET Accredited (Yes/No) ¹

¹ Skip the rest of the form if you have an ABET accredited BSEE degree.

I certify the information on all pages of this form is complete and correct.

Signature of Student: _____ Date: _____

We certify this student has met the minimum requirements for the BSEE degree.

ECE Department Academic Associate, Date

ECE Associate Chair for Students, Date

Program Officer, Date

I. Mathematics

- A. A minimum of 24 quarter credit hours or 16 semester credit hours of college-level mathematics is required. List all college-level mathematics courses passed with a grade of C- or better in chronological order from least recently taken to most recently taken. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Number	Title	Qtr Credits	Sem Credits
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Qtr Credits Subtotal: _____			Sem Credits Subtotal: _____	
Total Credits (Qtr Credits + (1.5 x Sem Credits)): _____				

- B. For each of the following mathematics subjects that has been studied, indicate the college or university where the subject was studied, the course number, and the course title. All courses must have been passed with a grade of C- or better.

Subject	University	Number	Title
Differential Calculus	_____	_____	_____
Integral Calculus	_____	_____	_____
Differential Equations	_____	_____	_____
Linear Algebra	_____	_____	_____
Complex Variables	_____	_____	_____
Discrete Mathematics	_____	_____	_____
Probability	_____	_____	_____
Statistics	_____	_____	_____

II. Sciences

A. Basic Science

A minimum of 24 quarter credit hours or 16 semester credit hours of college-level basic science is required. List all college-level basic science courses passed with a grade of C- or better in chronological order from least recently taken to most recently taken. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Number	Title	Qtr Credits	Sem Credits
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Qtr Credits Subtotal:	_____	Sem Credits Subtotal:	_____	_____
Total Credits (Qtr Credits + (1.5 x Sem Credits)): _____				

B. Physics

A two-course sequence in calculus based college-level physics is required. List a sequence of Physics courses at least two courses long. Course must have been passed with a grade of C- or better. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Number	Title	Qtr Credits	Sem Credits
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

C. Computer Science

A knowledge of computer science is required. List at least one college-level computer science course passed with a grade of C- or better. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Number	Title	Qtr Credits	Sem Credits
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

III. Engineering Science and Engineering Design

- A. A minimum of 72 quarter credit hours or 48 semester hours of engineering science and design is required. At least 54 quarter credit hours or 36 semester credit hours must be in Electrical Engineering science and design. List **all Electrical Engineering courses** passed with a grade of C- or better in chronological order from least recently taken to most recently taken. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

[illegible]

- | University | Number | Title | Qtr Credits | Sem Credits |
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| Qtr Credits Subtotal: | | Sem Credits Subtotal: | | |
| Total Credits (Qtr Credits + (1.5 x Sem Credits)): | | | | |

- [illegible]

IV. General Education

- A. A minimum of 24 quarter credit hours or 16 semester credit hours is required in general education courses that complement the technical curriculum and are consistent with program and institution objectives. List all courses in subjects other than mathematics, basic science, computer science, and engineering passed with a grade C- or better. List courses in chronological order from least recently taken to most recently taken. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours. Examples of topics in these areas include philosophy, fine arts, sociology, psychology, political science, anthropology, economics, and foreign languages.

University	Number	Title	Qtr Credits	Sem Credits
Qtr Credits Subtotal:		Sem Credits Subtotal:		
Total Credits (Qtr Credits + (1.5 x Sem Credits)):				

Section to be filled out by Academic Associate during final student interview after reviewing the student academic background

<i>Student has demonstrated that he/she has:</i>	<i>Satisfied</i> ✓	<i>Comments</i>
An ability to apply knowledge of mathematics, science, and engineering		
An ability to design and conduct experiments, as well as to analyze and interpret data		
An ability to design a system, component, or process to meet desired needs		
An ability to function on multi-disciplinary teams		
An ability to identify, formulate, and solve engineering problems		
An understanding of professional and ethical responsibility		
The broad education necessary to understand the impact of engineering solutions in a global and societal context		
A recognition of the need for, and an ability to engage in life-long learning		
A knowledge of contemporary issues		
An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice		

Additional comments:

Naval Postgraduate School
Department of Electrical and Computer Engineering
List of Undergraduate Level Courses

General Purpose

EC1010 Introduction to MATLAB (1.5 quarter credits)

EC2010 Probabilistic Analysis of Signals and Systems (3.5 quarter credits)

Circuits and Electronics

EC2100 Circuit Analysis (4 quarter credits)

EC2110 Circuit Analysis II (4 quarter credits)

EC2200 Introduction to Electronics Engineering (4.5 quarter credits)

Controls

EC2300 Control Systems (4 quarter credits)

EC2320 Linear Systems (3.5 quarter credits)

Signal Processing

EC2400 Discrete Systems (3.5 quarter credits)

EC2410 Analysis of Signals and Systems (3.5 quarter credits)

EC2450 Accelerated Review of Signals and Systems (4 quarter credits)

Communications

EC2500 Communications Systems (4 quarter credits)

Electromagnetics

EC2600 Electromagnetic Fields and Waves (4 quarter credits) (*last offered during FY03*)

EC2610 Electromagnetic Engineering (3.5 quarter credits) (*last offered during FY03*)

EC2650 Accelerated Review of Electromagnetics (4.5 quarter credit) (*replaces EC2600 & EC2650 starting FY04*)

Computers

EC2820 Digital Logic Circuits (4 quarter credits)

EC2840 Introduction to Microprocessors (4 quarter credits)

Design

EC2220 Applied Electronics; ABET Design Project in Electrical Engineering (5 quarter credits)